39. The device of claim 8, wherein at least two of said plurality of first alignment directions of the first alignment layer are parallel to one another.--

REMARKS

I. Status of the Claims

Claims 1, 3, 4, and 6-39 are pending. Claims 2 and 5 have been canceled without prejudice or disclaimer, and the provisions contained therein have been incorporated into claim 1. Claims 13, 21, 24 and 29 have been amended, and new claims 37-39 have been added, to more particularly point out and distinctly claim that which Applicant consider to be the invention. Specifically, claims 13, 21 and 24 have been amended to correct minor typographical errors in accordance with the Office's suggestions set forth in the Office Action dated December 10, 1998. Claim 29 has been amended to recite that the first alignment layer has "a plurality of alignment directions over the first substrate." Finally, claims 37-39 have been added to recite inventive features originally recited in claim 2, 18 and 19, respectively. Support for the amendments to the claims can be found in the specification and claims as originally filed, and therefore no issue of new matter is raised by these amendments.

The specification has also been amended to correct minor typographical errors, and to provide antecedent basis for originally filed claims 28 and 36. These amendments to the specification were also made in the manner suggested by the Office. Support for these amendments can be found in the claims as originally filed.

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Because originally filed claims are part of the as-filed specification, these claims provide the basis for the addition to page 10 of the specification. Accordingly, no issue of new matter is created by the amendments to the specification.

II. Objections to the Specification and Claims

Applicant respectfully submits that these objections have been overcome by the foregoing amendments adopting the Office's express suggestions. Accordingly, Applicant respectfully requests that the objections be withdrawn.

III. Rejections under 35 U.S.C. § 112

Claims 13, 27, and 35 were rejected under 35 U.S.C. § 112, second paragraph, for the reasons set forth on page 3 of the Office Action. Applicant respectfully submits that the rejection of claim 13 has been rendered moot by the amendment to the claim correcting its dependency.

Turning to claims 27 and 35, the Office alleges that the term "partially polarized" is not defined in the specification, and is therefore indefinite. Applicant respectfully disagrees because this term is widely known to those of ordinary skill in the art, and thus would not need to be defined in the specification. The skilled artisan would understand how the term "partially polarized" further limits the claim. Moreover, the plain language meaning of the term is clear and definite: "partially polarized" light refers to light that has been polarized, but not completely.

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Accordingly, Applicant respectfully submits that the rejection under 35 U.S.C. § 112, second paragraph, has been overcome, and requests that the rejection be withdrawn.

IV. Rejections under 35 U.S.C. § 103(a)

Claims 1-25, 28-33 and 36 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Yeh et al., U.S. Patent No. 5,196,953, in view of Sugiyama et al., U.S. Patent No. 5,757,455, for the reasons set forth on pages 4 and 5 of the Office Action. Claims 26, 27, 34 and 35 were rejected under 35 U.S.C. § 103(a) over Yeh et al. in view of Sugiyama et al. and further in view of Toko, U.S. Patent No. 5,793,459, for the reasons set forth on page 5 of the Office Action. Applicant respectfully traverses these rejections.

In order to establish a *prima facie* case of obviousness, there must be some suggestion or motivation to modify the teachings of the reference relied upon in the rejection. *See M.P.E.P. § 2143.* The teaching or suggestion to make the claimed composition must be found in the prior art, not in Applicants' disclosure. *Id.* Moreover, the mere fact that references can be combined does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *See M.P.E.P. § 2143.01.*

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In the present case, the prior art relied upon by the Office fails to provide the motivation necessary to make the modifications suggested by the Office. According to the Office, Yeh et al. discloses a liquid crystal display comprising two substrates that can be either a reflective-type display or a transmissive-type display. However, Yeh et al. fails to specifically disclose that a reflective electrode is formed on one of the substrates. Additionally, Yeh et al. fails to disclose that a first alignment layer is formed over one substrate while a second alignment layer is formed over the other substrate. Thus, Yeh et al. fails to teach or suggest all the limitations which are now recited in independent claim 1.

Moreover, as the Office admits in the rejections under Section 103(a), Yeh et al. also fails to teach or suggest "an alignment layer having a plurality of alignment directions." *See* page 4 of the Office Action. Independent claims 8, 14 and 29 recite that the claimed reflective-type liquid crystal display device contains a first alignment layer having a plurality of first alignment directions over the first substrate. Therefore, Yeh et al. also fails to teach or suggest all the limitations recited in independent claims 8, 14 and 29.

Applicant submit that Toko is completely silent with respect to any reflective-type liquid crystal display or any alignment layer having a plurality of alignment directions. Thus, in any attempt to arrive at the presently claimed invention, the Office must rely

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upon the teachings of Sugiyama et al. to make up for the deficiencies in Yeh et al. set forth above.

In contrast to the reflective-type liquid crystal display device disclosed in Yeh et al. and the reflective-type device of the present invention, Sugiyama et al. is directed to a hybrid alignment type liquid crystal display. This hybrid alignment type display has properties that are similar to conventional TN type (transmissive) liquid crystal displays. Nothing in Sugiyama et al. teaches or suggests a reflective-type liquid crystal display as recited in the presently claimed invention. In fact, Sugiyama et al. is completely silent with respect to any reflective electrode formed over a substrate in the hybrid alignment type display disclosed in this reference. Thus, nothing in Sugiyama et al. would have led one of ordinary skill in the art to form a reflective electrode over a substrate in the device disclosed in Yeh et al. in an attempt to arrive at the invention recited in claim 1.

Additionally, because the hybrid alignment type liquid crystal displays according to Sugiyama et al. are dissimilar from reflective-type liquid crystal displays, one of ordinary skill in the art would not have looked to the teachings of Sugiyama et al. to solve a problem associated with any reflective-type liquid crystal display. The dissimilarity between these two types of liquid crystal displays would therefore have kept one of ordinary skill in the art away from the teachings of Sugiyama et al. when trying to solve a problem associated with the reflective-type liquid crystal display of Yeh et al.

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Applicant respectfully submits that nothing, other than Applicant's disclosure, would have directed one of ordinary skill in the art to use any alignment layer, let alone an alignment layer having a plurality of alignment directions on a substrate of the liquid crystal device disclosed in Yeh et al.. Therefore, the prior art relied upon by the Office fails to suggest the desirability of combining the references, and a *prima facie* case of obviousness would not be established for this reason.

Moreover, even assuming, *arguendo*, that one of ordinary skill in the art would have been led to combine the teachings of Yeh et al. and Sugiyama et al., a liquid crystal device according to the present invention would still not have been suggested by these combined teachings. The only type of liquid crystal display that is common to both Yeh et al. and Sugiyama et al. is a TN type (transmissive) liquid crystal display. Thus, the combined teachings could only suggest, at best, a TN type liquid crystal display. However, this type of display is outside the scope of the presently claimed reflective-type liquid crystal display. Absent some teaching or suggestion of this reflective-type liquid crystal display recited in the pending claims, the Office has failed to establish a *prima facie* case of obviousness for this additional reason.

Accordingly, for the above-mentioned reasons, Applicant respectfully requests that the rejection under 35 U.S.C. § 103(a) be withdrawn.

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V. Conclusion

In view of the foregoing amendments and remarks, Applicants respectfully submit that pending claims 1, 3, 4, and 6-39 are in condition for allowance. Reconsideration of the application, the allowance of the pending claims, and the passage of this application to issue are respectfully requested.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account no. 06-0916.

Respectfully submitted,

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Dated: April 12, 1999

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